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BRIARCLIFF MANOR, NY 10510

EXAMINER
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A, MINH D

ART UNIT	PAPER NUMBER
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2821

MAIL DATE	DELIVERY MODE
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03/04/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/538,107	<b>Applicant(s)</b> NING, CHANGLONG	
	<b>Examiner</b> MINH D. A	<b>Art Unit</b> 2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11/19/08.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-10, 21-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-10, 21-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***DETAILED ACTION***

This Office Action is a response to Applicant's Amendment filed on 11/19/08. By virtue of this amendment, claims 2-3, 11-20 were cancelled, new claims 21-30 have been added and thus, claims 1, 4-10 and 21-30 are currently presented in the instant application.

***Response to Arguments***

Applicant's arguments filed 11/19/08 have been fully considered but they are not persuasive. Therefore, claims 1, 4-10 remain rejected under 35 U.S.C. 103(a) as being unpatentable over by Ono et al (U.S Patent No: 6, 545, 430) in view of Eastlund et al (U.S Patent No: 6, 652, 344). See "Remarks and Conclusion" below for details and new claims 21-30 are rejected base on the cited references follow.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4-5, 10, 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ono et al (U.S Patent No: 6, 545, 430) in view of Eastlund et al (U.S Patent No: 6, 652, 344).

Regarding claim 1, Ono et al disclose in figure 3, a high-pressure mercury vapor discharge lamp (100) comprising a lamp vessel(arc tube (1) made of a

Art Unit: 2821

transparent ceramic material( quartz glass), enclosing a discharge space (8) comprising an ionizable discharge medium(mercury and gas ) and at least two electrodes(2 and 3) having electrode tips(22 and 32) that are spaced apart at a mutual distance  $d(De)$ , and electrical feed-through elements(6 and 7) which extend from the at least two electrodes to an exterior of the lamp(1), (col.4, lines 28-54) , wherein the distance  $d(De)$  between the electrode tips is less than 1.0mm(Col.4, lines 40-42).

Ono et al do not disclose that, a mercury density in the lamp vessel is higher than  $0.3 \text{ mg/mm}^3$ .

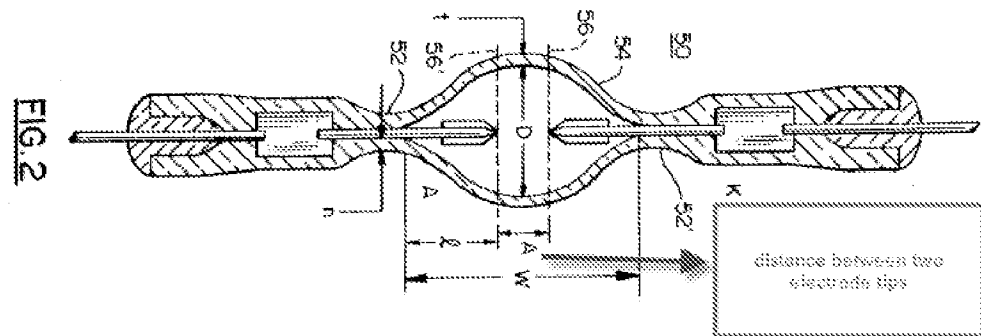
Eastlund et al disclose the mercury density is between  $10 \text{ mg/cm}^3$  and  $600 \text{ mg/cm}^3$ . Col. 11, lines 21-23, note that,  $10 \text{ mg/cm}^3$  and  $600 \text{ mg/cm}^3 = 0.01 \text{ mg/mm}^3$  and  $0.6 \text{ mg/mm}^3$ .

It would have been obvious to one having ordinary skill in the art to employ the mercury density disclosed in the high intensity discharge lamp of Eastlund in the high pressure discharge lamp of Ono to achieve the claimed invention. As disclosed in the high intensity discharge lamp of Eastlund et al , the motivation for the combination would be to obtain the lamp life and efficacy.

Combination Ono et al and Eastlund et al do not clearly point out that, wherein the distance  $d$  between the electrodes tips from 0.3 to 0.8mm.

Note that, Ono disclose the distance ( $De$ ) between two electrodes tips can be set at the range of .05mm to .02 mm as well as shown in col.4, lines 40-45, therefore, the distance  $d$  between the electrodes tips from 0.3 to 0.8mm is well-known and well suited for design of use, selection of the known the distance into

the structure of the high pressure discharge lamp of Ono and Eastlund et al would have been deemed obvious to a person skilled in the art. (see another example, Graham et al (U.S Patent No,5,144, 201, figure 2 below, distance (A) is range between 0.075 and .28 mm as shown on col.7, line 68 to col.8, line 1.



Further more, changes such as these may impart patentability to a process if the particular ranges claimed produce a new and unexpected result which is different in kind and not merely in degree from the results of the prior art. In re Dreyfus, 22 CCPA (Patents) 830, 73 F.2d 931, 24 USPQ 52; In re Waite et al., 35 CCPA (Patents) 1117, 168 F.2d 104, 77 USPQ 586. Such ranges are termed "critical" ranges, and the applicant has the burden of proving such criticality. In re Swenson et al., 30 CCPA (Patents) 809, 132 F.2d 1020, 56 USPQ 372; In re Scherl, 33 CCPA (Patents) 1193, 156 F.2d 72, 70 USPQ 204. However, even though applicant's modification results in great improvement and utility over the prior art, it may still not be patentable if the modification was within the capabilities of one skilled in the art. In re Sola, 22 CCPA (Patents) 1313, 77 F.2d 627, 25 USPQ 433; In re Normann et al., 32 CCPA (Patents) 1248, 150 F.2d 627, 66 USPQ 308; In re Irmischer, 32 CCPA (Patents) 1259, 150 F.2d 705, 66 USPQ 314.

Regarding claim 4, Ono et al and Eastlund et al obviously disclose wherein the mercury density is between  $10 \text{ mg/cm}^3$  and  $600 \text{ mg/cm}^3$ . (See col. 11, lines 21-23 of Eastlund et al) corresponding to the ranges from 0.3 to 0.8  $\text{mg/mm}^3$ ).

Regarding claim 5, Ono et al and Eastlund obviously disclose wherein the mercury density in the lamp vessel is between  $10 \text{ mg/cm}^3$  and  $600 \text{ mg/cm}^3$ . (See col.11, lines 21-23 of Eastlund et al) corresponding to the range from 0.4 to 0.7  $\text{mg/mm}^3$ .

Regarding claim 10, Ono et al and Eastlund et al obviously disclose a lighting apparatus, comprising a main body and at least the lamp.

Regarding claim 28, Ono et al disclose in figure 3, a high-pressure mercury vapor discharge lamp (100) comprising a lamp vessel(arc tube (1) made of a transparent ceramic material( quarts glass), enclosing a discharge space (8) comprising an ionizable discharge medium(mercury and gas ) and at least two electrodes(2 and 3) having electrode tips(22 and 32) that are spaced apart at a mutual distance  $d(\text{De})$ , and electrical feed-through elements(6 and 7) which extend from the at least two electrodes to an exterior of the lamp(1), (col.4, lines 28-54).

Ono et al do not disclose that, a mercury density in the lamp vessel is higher than  $0.3 \text{ mg/mm}^3$ .

Art Unit: 2821

Eastlund et al disclose the mercury density is between  $10 \text{ mg/cm}^3$  and  $600 \text{ mg/cm}^3$ . Col. 11, lines 21-23, note that,  $10 \text{ mg/cm}^3$  and  $600 \text{ mg/cm}^3 = 0.01 \text{ mg/mm}^3$  and  $0.6 \text{ mg/mm}^3$ .

It would have been obvious to one having ordinary skill in the art to employ the mercury density disclosed in the high intensity discharge lamp of Eastlund in the high pressure discharge lamp of Ono to achieve the claimed invention. As disclosed in the high intensity discharge lamp of Eastlund et al , the motivation for the combination would be to obtain the lamp life and efficacy.

Regarding claim 29, Ono et al and Eastlund et al obviously disclose all of subject matter as expressly recited in claim 1 that, wherein the distance (De) between the electrode tips ranges from 0.3 to 0.8 mm. Col.4, lines 40-41 of Ono.

Regarding claim 30, Ono et al and Eastlund et al obviously disclose all of subject matter as expressly recited in claim 1 that, wherein the distance (De) between the electrode tips ranges from 0.3 to 0.6 mm. Col.4, lines 40-41 of Ono and the example of Graham above.

3. Claims 6-7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Ono et al (U.S Patent No: 6, 545, 430) in view of Eastlund et al (U.S Patent No: 6, 652, 344) as applied to claim 1 above, and further in view of Honda et al (U.S Patent No: 6, 307, 321).

Regarding claims 6-7, Ono et al and Eastlund et al obviously disclose all of the claimed limitations, except for a bulging section communicating with at least two feed-through channels having an inner diameter smaller than the bulging section and wherein the bulging section is substantially cylindrical over

Art Unit: 2821

the distance  $d$  and has an internal cross-sectional diameter  $D_i$  ranging from 1.5 to 4.5 mm and a length  $L$  ranging from 4 to 8 mm.

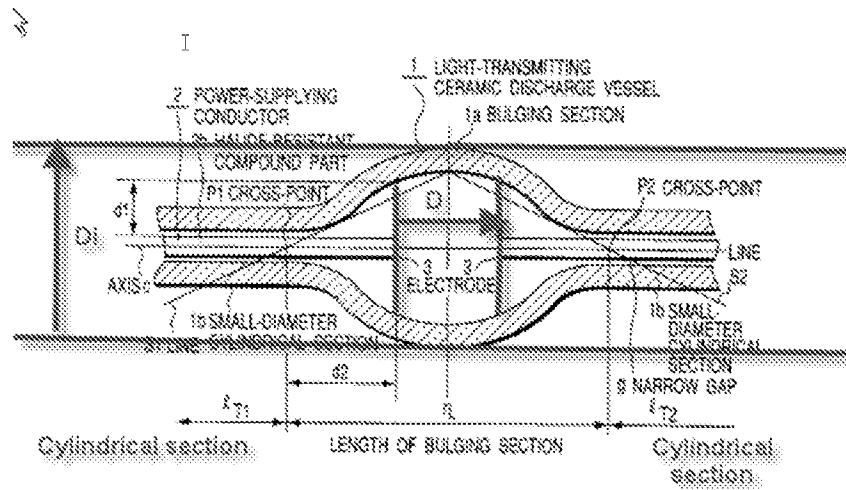


FIG. 2

Honda et al disclose, in figure 2 above, wherein the lamp vessel comprises a bulging section (1a) communicating with at least two feed-through channels (see figure 2 above, cylindrical section) having an inner diameter (1b) smaller than the bulging section (1a) and wherein the bulging section (1a) is substantially cylindrical over the distance  $d$  ( $D$ ) (see label in figure 2) and has an internal cross-sectional diameter  $D_i$  (see label in figure 2) ranging from 1.5 to 4.5 mm (see table 1, col.10, lines 1-10) and a length  $L$  ranging from 4 to 8 mm (see col.9, lines 37-40).

It would have been obvious to one having ordinary skill in the art to employ the wherein the lamp vessel comprises a bulging section (1a) communicating with at least two feed-through channels (figure 2, cylindrical



Art Unit: 2821

section) having an inner diameter(1b) smaller than the bulging section(1a) and wherein the bulging section being substantially cylindrical over the distance d and has an internal cross-sectional diameter  $D_i$  ranging from 1.5 to 4.5 mm and a length L ranging from 4 to 8 mm disclosed in Reference of Honda et al in the discharge device of to achieve the claimed invention. As disclosed in Reference of Honda et al, the motivation for the combination would be to improve the lamp life and high efficiency for the high pressure discharge lamp and lighting apparatus.

Regarding claim 9, Ono et al and Eastlund et al obviously disclose all of the claimed limitations except for wherein the lamp vessel is made of a transparent ceramic material chosen from a group consisting of sub-micro polycrystalline aluminum (PCA), yttrium aluminum garnet (YAG), Y2O3, MgAl2O4, and aluminum nitride (AlN).

Honda et al disclose, in figure 2, wherein the lamp vessel is made of a transparent ceramic material chosen from a group consisting of sub-micro polycrystalline aluminum (PCA), yttrium aluminum garnet (YAG), Y2O3, MgAl2O4, and aluminum nitride (AlN). Col.2, lines 45-56.

It would have been obvious to one having ordinary skill in the art to employ the transparent ceramic material chosen from a group consisting of sub-micro polycrystalline aluminum (PCA), yttrium aluminum garnet (YAG), Y2O3, MgAl2O4, and aluminum nitride (AlN). Col.2, lines 45-56 disclosed in Reference of Honda et al in the discharge device of Ono et al and Eastlund et al to achieve the claimed invention. As disclosed in Reference of Honda et al, the motivation

Art Unit: 2821

for the combination would be to improve the long lifetime for discharge lamp and an optimum performance.

4. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over by Ono et al (U.S Patent No: 6, 545, 430) and Eastlund et al (U.S Patent No: 6, 652, 344) in view of Honda et al (U.S Patent No: 6, 307, 321) as applied to claim 6 above, and further in view of Genz et al (U.S Patent No. 6, 054, 811).

Regarding claim 8, the combination of Ono et al and Eastlund et al and Honda a obviously disclose all of claimed subject matters, as expressly recited in claims 1 and 6, except for wherein a wall load inside of the lamp vessel during operation ranges from 40 to 150 W/cm<sup>2</sup>.

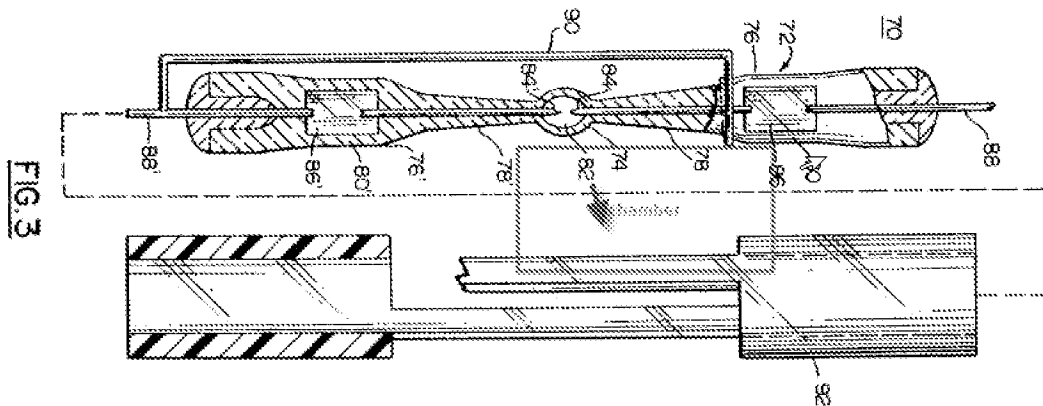
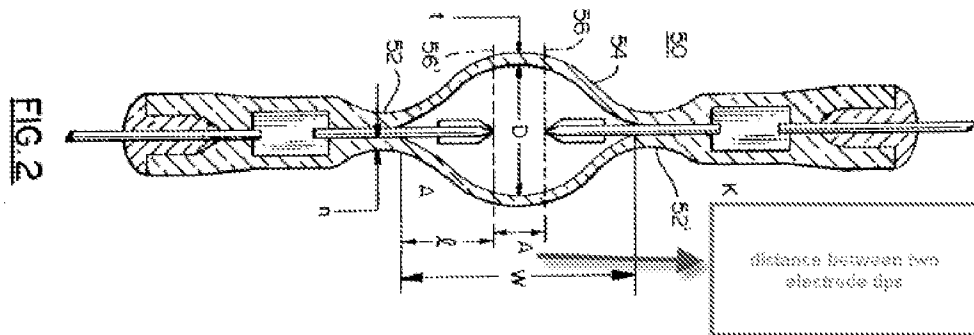
Genz et al disclose, in figure 1, wherein a wall load inside of the lamp vessel during operation ranges from 40 to 150 W/cm<sup>2</sup>. Col.6, lines 46-47.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the wall load inside of the lamp vessel during operation ranges from 40 to 150 W/cm<sup>2</sup> disclosed in Reference of Genz in the discharge device of the combination Ono et al and Eastlund et al and Honda et al to achieve the claimed invention. As disclosed in Reference of Genz et al, the motivation for the combination would be to obtain the high wattage for operation of discharge lamp.

5. Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Graham et al (U.S Patent 5, 144,201) in view of Ono et al (U.S Patent

Art Unit: 2821

No: 6, 45,430).



Regarding claim 21, Graham et al disclose, in figure 2-3, a high-pressure discharge lamp comprising: a discharge space (chamber (82) having a discharge space) including an ionizable discharge medium( mercury and gas) and at least two electrodes(84, 84') having electrode tips which are separated by distance d(Arc Distance A)( figure 3, col.7, lines 20-27); a lamp vessel(bulb(74)) enclosing

Art Unit: 2821

the discharge space; and feed-through elements(pair of wire lead(88, 88') which extend from the at least two electrodes(84,84') to an exterior; wherein the distance d(Arc distance A) between the electrode tips may range between 0.075 and 0.28 mm as shown in clo.7, lines 67-68 to col.8, line 1 and also table 1, shows Arc distance A, col1.7, lines 45-64.

Graham et al do not point out that, wherein the distance d between the electrode tips is from 0.3 to 0.8mm.

Note that, Ono disclose the distance (De) between two electrodes tips can be set at the range of .05 mm to .02 mm as well as shown in col.4, lines 40-45, therefore, the distance d between the electrodes tips from 0.3 to 0.8mm is well-known and well suited for design of use, selection of the known the distance into the structure of the high pressure discharge lamp of Graham would have been deemed obvious to a person skilled in the art.

Further more, changes such as these may impart patentability to a process if the particular ranges claimed produce a new and unexpected result which is different in kind and not merely in degree from the results of the prior art. In re Dreyfus, 22 CCPA (Patents) 830, 73 F.2d 931, 24 USPQ 52; In re Waite et al., 35 CCPA (Patents) 1117, 168 F.2d 104, 77 USPQ 586. Such ranges are termed "critical" ranges, and the applicant has the burden of proving such criticality. In re Swenson et al., 30 CCPA (Patents) 809, 132 F.2d 1020, 56 USPQ 372; In re Scherl, 33 CCPA (Patents) 1193, 156 F.2d 72, 70 USPQ 204. However, even though applicant's modification results in great improvement and utility over the prior art, it may still not be patentable if the modification was within the capabilities of one skilled in the art. In re Sola, 22 CCPA (Patents) 1313, 77 F.2d

Art Unit: 2821

627, 25 USPQ 433; In re Normann et al., 32 CCPA (Patents) 1248, 150 F.2d 627, 66 USPQ 308; In re Irmischer, 32 CCPA (Patents) 1259, 150 F.2d 705, 66 USPQ 314.

Regarding claim 22, Graham et al obviously disclose all of subject matter as recited in claim 21 that, wherein the distance between the electrode tips ranges from 0.3 to 0.8 mm. See table 1 on col.7, lines 45-63.

Regarding claim 23, Graham et al obviously disclose, in figure 2-3, wherein the distance between the electrode tips ranges from 0.3 to 0.6 mm. Col.8, lines 67-68 for the arc distance A may range between 0.5 to .8mm.

6. Claims 24-25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Graham et al (U.S. Patent No: 5, 144, 20) in view of Ono et al (U.S Patent No: 6, 45,430) as applied to claim 21 above, and further in view of Honda et al (U.S Patent No: 6, 307, 321).

Regarding claims 24-25, Graham et al and Ono et al obviously disclose all of claimed subject matters, as expressly recited in claim 21, except for wherein the lamp vessel(bulb) comprises a bulging section communicating with at least two feed-through channels having an inner diameter smaller than the bulging section and wherein the bulging section is substantially cylindrical over the distance d and has an internal cross-sectional diameter  $D_i$  ranging from 1.5 to 4.5 mm and a length L ranging from 4 to 8 mm.

Honda et al disclose, in figure 2 above, wherein the lamp vessel comprises a bulging section (1a) communicating with at least two feed-through channels (see figure 2 above, cylindrical section) having an inner diameter(1b) smaller than the bulging section(1a) and wherein the bulging section(1a) is

Art Unit: 2821

substantially cylindrical over the distance  $d$  ( $D$ )( see label in figure 2) and has an internal cross-sectional diameter  $D_i$ ( see label in figure 2) ranging from 1.5 to 4.5 mm ( see table 1, co1.10, lines 1-10) and a length  $L$  ranging from 4 to 8 mm (see co1.9, lines 37-40).

It would have been obvious to one having ordinary skill in the art to employ the wherein the lamp vessel comprises a bulging section (1a) communicating with at least two feed-through channels (see figure 2, cylindrical section) having an inner diameter (1b) smaller than the bulging section(1a)and wherein the bulging section is substantially cylindrical over the distance  $d$  and has an internal cross-sectional diameter  $D_i$  ranging from 1.5 to 4.5 mm and a length  $L$  ranging from 4 to 8 mm disclosed in Reference of Honda et al in the discharge device of the high pressure discharge lamp of Graham et al and Ono et al to achieve the claimed invention. As disclosed in Reference of Honda et al, the motivation for the combination would be improved the lamp life and high efficiency for the high pressure discharge lamp and lighting apparatus.

Regarding claim 27, Graham et al and Ono obviously disclose all of the claimed limitations except for wherein the lamp vessel is made of a transparent ceramic material chosen from a group consisting of sub-micro polycrystalline aluminum (PCA), yttrium aluminum garnet (YAG), Y2O3, MgAl2O4, and aluminum nitride (AlN).

Honda et al disclose, in figure 2, wherein the lamp vessel is made of a transparent ceramic material chosen from a group consisting of sub-micro

Art Unit: 2821

polycrystalline aluminum (PCA), yttrium aluminum garnet (YAG), Y2O3, MgAl2O4, and aluminum nitride (AlN). Col.2, lines 45-56.

It would have been obvious to one having ordinary skill in the art to employ the transparent ceramic material chosen from a group consisting of sub-micro polycrystalline aluminum (PCA), yttrium aluminum garnet (YAG), Y2O3, MgAl2O4, and aluminum nitride (AlN). Col.2, lines 45-56 disclosed in Reference of Honda et al in the discharge device of Ono et al and Eastlund et al to achieve the claimed invention. As disclosed in Reference of Honda et al, the motivation for the combination would be to improve the long lifetime for discharge lamp and an optimum performance.

7. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over by Graham et al (U.S Patent 5, 144,201) in view of Ono et al (U.S Patent No: 6, 45,430) as applied to claim 21 above, and further in view of Genz et al (U.S Patent No. 6, 054, 811).

Regarding claim 26, Graham et al and Ono et al disclose all of claimed subject matters, as expressly recited in claim 21, except for wherein a wall load inside of the lamp vessel during operation ranges from 40 to 150 W/cm<sup>2</sup>.

Genz et al disclose, in figure 1, wherein a wall load inside of the lamp vessel during operation ranges from 40 to 150 W/cm<sup>2</sup>. Col.6, lines 46-47.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the wall load inside of the lamp vessel during operation ranges from 40 to 150 W/cm<sup>2</sup> disclosed in Reference of Genz in the discharge device of Graham et al and Ono et al to achieve the claimed

Art Unit: 2821

invention. As disclosed in Reference of Genz et al, the motivation for the combination would be obtained the high wattage for operation of discharge lamp.

***Remarks/conclusion***

8. Applicant's arguments filed on 11/19/09 have been fully considered but they are not persuasive.

In response to applicant's argument on amended claims 1, 21 and claim 28 in page 5, lines 16-27 that "In contrast, independent claims 1, 21 recited, amongst other patentable elements recited (i) wherein the distance  $d$  between the electrode tips is from 0.3 to 0.8mm and (ii) wherein the ionizable discharge medium includes mercury having from 0.3 to .8 mg/mm<sup>3</sup>".

(i) Examiner notes that, Ono disclose that, the distance  $d(De)$  between the electrode tips can be set in the range of 2.0 mm to 5.0 m and the value of  $De$  can be set at in range of 0.5mm to 2.0mm in order to improve the efficiency for light utilization as show in col.4, lines 36-44.

(i) Examiner also notes that, Eastlund et al disclose the mercury density is between 10 mg/cm<sup>3</sup> and 600 mg/cm<sup>3</sup>. Col. 11, lines 21-23, note that, 10 mg/cm<sup>3</sup> and 600 mg/cm<sup>3</sup> = 0.01 mg/mm<sup>3</sup> and 0.6 mg/mm<sup>3</sup>.

Selection of the distance  $d$  between the electrodes tips from 0.3 to 0.8mm and the mercury density being between 0.3 to .8 mg/mm<sup>3</sup> are well-known and well suited for design of use, selection of the known the distance of electrode tips and the mercury density of lamp into the structure of the high pressure discharge lamp of Ono and Eastlund et al would have been deemed obvious to a person skilled in the art. Further more, a recitation of the intended use of the claimed



Art Unit: 2821

invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

***Citation of relevant prior art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Prior art Ikeuchi et al (U.S. Patent No. 5,905, 341) discloses a high pressure mercury ultraviolet lamp.

Prior art Van Vleet et al. (U.S. Patent No. 5,973,453) discloses a ceramic metal halide discharge lamp.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dieu A whose telephone number is (571) 272-1817. The examiner can normally be reached on M-F (5:30 AM-2: 45 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas W Owens can be reached on (571) 272-1662. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner

Minh A

Art Unit 2821

2/22/09

/Douglas W Owens/  
Supervisory Patent Examiner, Art Unit 2821